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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,880	11/20/2000	Markku Lipponen	460-009934-US	1077
7590	03/16/2006			
Clarence A Green Peerman & Green LLP 425 Post Road Fairfield, CT 06430			EXAMINER TRINH, TAN H	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/716,880	Applicant(s) LIPPONEN ET AL.	
	Examiner TAN TRINH	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 12-15 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 5 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-12-2005 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 9, 15, 20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Taylor (U.S. Patent No. 20030025679).

Regarding claims 1, 9 and 15 Taylor teaches an electronic device (see fig. 1), having least a keyboard (see fig. 1, keyboard 20), comprising at least one key for controlling the functions of the mobile station (see fig. 1, and 11, page 2, section [0038] and page 5, section [0081]), a touch sensitive element (see fig. 2 and 3, sensitive touchpad 26, page 3, sections [0051-0052]), a keyboard plate fixed over the touch sensitive element (see fig. 2, keyboard plate (key-mat) 22 fixed over the sensitive touchpad 26), so that the depression of a key of the keyboard plate cause

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the key to touch the touch sensitive element essentially at a position on the touch sensitive element corresponding to the point of the key and mean correlating the position of touching on the sensitive element according to which key is depressed (see figs. 1-3, pages 2-3, sections [0038-0052])).

Regarding claims 2 and 20, Taylor teaches an electronic device characterized in that the keyboard plate is a keyboard mat (see figs. 2-3, keyboard mat 22, page 2, section [0039-0040] and page, 3 section [0043]).

Regarding claim, 22, Taylor teaches wherein the electronic device is provided with a position recognizing element for recognizing the position of the keyboard element (see figs. 6-8 and 11, pages 3-5, sections [0046-0081]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (U.S. Patent No. 20030025679) in view of Harris (U.S. Patent No. 6164531).

Regarding claims 4 and 10, Taylor fails to teach the further comprising a sliding keyboard element in which the keyboard is disposed.

However, Harris teaches a sliding keyboard element in which the keyboard is disposed (see fig. 8, col. 7, lines 35-col. 8, line 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Taylor system and by the teaching of Harris on the sliding keyboard element technique in order to provide user with larger surface of key pad.

Regarding claim 19, Taylor teaches wherein the electronic device is provided with a position recognizing element for recognizing the position of the keyboard element (see figs. 6-8 and 11, pages 3-5, sections [0046-0081]).

6. Claims 3, 6-8, 12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (U.S. Patent No. 20030025679) in view of Riddiford (U.S. Patent No. 6587675).

Regarding claims 3 and 21, Taylor teaches wherein the keyboard plate is a rubber-like material which is able to deform (see page 2-3, sections [0039-0043]). But Taylor fails to teach the keyboard plate is a bubble membrane.

However, Riddiford inherently teaches the keyboard plate is a bubble membrane (see fig. 4, flexible membrane 22, and col. 3, lines 63-col. 4, line 8, since on depressing a key, is underside contacts the membrane surface on bubble membrane and connects two adjacent conductive area).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Taylor system and by the teaching of Riddiford on the membrane space surface technique in order to provide the array of keys which each has a conductive surface

facing the membrane and spaced slightly away from the membrane when no key is depressed (see Riddiford col. 3, line 65-col. 4, line 1).

Regarding claims 6 and 12, Taylor teaches an electronic device (see fig. 1) which comprises at least one body housing element (see fig. 9, body housing 80), But Taylor fails to teach a keyboard element arranged as turning in relation to the body housing element in which keyboard element the keyboard is disposed.

However, Riddiford teaches a keyboard element (see fig. 1, keyboard element 1) arranged as turning in relation to the body housing element in which keyboard element the keyboard is disposed (see fig. 2, when the keyboard element 1 is turning over the keyboard is disposed, col. 3, lines 34-col. 4, lines 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Taylor system and by the teaching of Riddiford on the turning keyboard element technique in order to provide user with larger surface of full size keyboard.

Regarding claim 7, Riddiford teaches an electronic device (see fig. 1) wherein the keyboard element which has a first and a second extreme position (see fig. 1 for first position and fig. 2, for second position), is arranged as turning between the first and the second extreme position (see fig. 1 and 2), and in the first extreme position the keyboard element is preferably placed over the body housing element so that the keyboard element functions as protection for the display and the keyboard is at least partly invisible (see fig. 1), and in the second extreme

position the keyboard element is preferably so that the keyboard and the display are essentially entirely exposed (see fig. 2 or fig. 6, col. 4, lines 8-53).

Regarding claim 8, Riddiford teaches further comprising another display and another keyboard arranged activating one or more functions of the electronic device preferably when the keyboard element is in the extreme position (see figs. 2 and 6, col.3, line34-col. 4, lines 31).

7. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (U.S. Patent No. 20030025679) in view of Harris (U.S. Patent No. 6164531) further in view of Riddiford (U.S. Patent No. 6587675).

Regarding claim 13, the combine of Taylor and Harris fails to teach the keyboard element which is arranged as turning between the first and the second extreme position and in the first extreme position the keyboard element is preferably placed over the body housing element so that the keyboard element functions as protection for the display and the keyboard is at least partly invisible and in the second extreme position the keyboard element is preferably so that the keyboard and the display are essentially entirely exposed.

However, Riddiford teaches an electronic device (see fig. 1) wherein the keyboard element which has a first and a second extreme position (see fig. 1 for first position and fig. 2, for second position), is arranged as turning between the first and the second extreme position (see fig. 1 and 2), and in the first extreme position the keyboard element is preferably placed over the body housing element so that the keyboard element functions as protection for the

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display and the keyboard is at least partly invisible (see fig. 1), and in the second extreme position the keyboard element is preferably so that the keyboard and the display are essentially entirely exposed (see fig. 2 or fig. 6, col. 4, lines 8-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Taylor and Harris system and by the teaching of Riddiford on the turning keyboard element technique in order to provide user with larger surface of full size keyboard.

Regarding claim 14, Riddiford teaches further comprising another display and another keyboard arranged activating one or more functions of the electronic device preferably when the keyboard element is in the extreme position (see figs. 2 and 6, col.3, line34-col. 4, lines 31).

Allowable Subject Matter

8. Claims 5 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for allowance

The following is an examiner's statement of reasons for allowance:

Regarding claims 5 and 11, Taylor, Harris and the prior art of record fail to disclose the sliding keyboard element in claim 4, comprising at least one of body housing element wherein the keyboard element which has a first and a second extreme position, is ranged as sliding between the first and second extreme position, and in the first extreme position the key board

element is under the body housing element that the keyboard is at least partly invisible, and in the second extreme position the keyboard element is preferably so that the keyboard is essentially entirely exposed (see fig. 1) as cited in claims 5 and 11.

Conclusion

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to the Customer Service Window (now located at the **Randolph Building, 401 Dulany Street, Alexandria, VA 22314**).*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh
Division 2618
March 7, 2006



Anderson, Matthew D. (SPE 2618)